

GAO

United States General Accounting Office

Briefing Report to the Honorable
Dana Rohrabacher, House of
Representatives

September 1990

NAVY SHIPS

Costs of Homeporting the U.S.S. Missouri in Pearl Harbor Versus Long Beach

AD-A228 017



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National Security and
International Affairs Division

B-239923

September 28, 1990

The Honorable Dana Rohrabacher
House of RepresentativesDTIC
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Dear Mr. Rohrabacher:

As you requested, we (1) compared the costs to homeport the U.S.S. Missouri in Pearl Harbor, Hawaii, with those to permanently homeport the battleship in Long Beach, California; and (2) determined if each location had sufficient repair and maintenance facilities to dry-dock and overhaul the battleship. As a separate matter and in line with your request, we also compared the value of the Manana Storage Area and Pearl City Junction properties with the minimum compensation the Navy can accept for conveying the properties to the State of Hawaii. In March 1990, we briefed you on the preliminary results of our work. This report summarizes and updates the contents of that briefing.

Results in Brief

Our review indicates that homeporting the U.S.S. Missouri in Pearl Harbor will be more costly to the Navy than homeporting the battleship permanently in Long Beach. Excluding family housing cost, the total estimated nonrecurring cost to homeport the battleship in Pearl Harbor is \$63.6 million compared to \$17 million in Long Beach. The total estimated nonrecurring cost does not include the cost to construct family housing. However, due to a dwindling rental market, high rents, and increased military eligibility, we estimate that between \$38 million and \$59 million may be needed to construct 570 to 700 family housing units if sufficient government quarters are not available in Pearl Harbor. For Long Beach, the Navy estimated that \$44 million would be required for 516 family housing units. However, we excluded the \$44 million from our calculation because we believe the 516 units may not be required after the battleship U.S.S. New Jersey is retired. The total estimated annual recurring costs at Pearl Harbor and Long Beach are about \$47.5 million and \$46.3 million, respectively. The naval shipyards at both Pearl Harbor and Long Beach have the facilities and sufficiently skilled work forces to dry-dock and overhaul the battleship. However, in January 1990, the Secretary of Defense proposed that the Long Beach shipyard be closed as part of the planned military reduction effort.

The Navy is authorized to convey 122 acres of land in Pearl Harbor to the State of Hawaii for not less than the fair market value of the properties. Payment can be made in cash or through the construction of a

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causeway to Ford Island and replacement and relocation of Navy facilities now on the properties. The Navy's estimate of the potential value of the 108-acre Manana Storage Area property is between \$31 million and \$84 million, depending on zoning. However, the Navy declined to provide us with information on its estimated value for the remaining 14 acres because it believes disclosure of such information could jeopardize its negotiating position. The Navy expects the State to build the causeway and to replace and relocate Navy activities on the properties for about \$81 million.

Background

In the mid-1980s, the Congress approved and began funding the Navy's strategic homeporting program. By 1985, the Navy had selected 13 preferred sites for the program, and in June 1985, the Secretary of Defense announced San Francisco (Treasure Island), California, as the strategic homeport for the U.S.S. Missouri and one cruiser.¹ The Secretary later changed the Treasure Island site to Hunters Point, California.

The U.S.S. Missouri was one of four Iowa-class battleships reactivated as part of the buildup toward a 600-ship Navy. The battleship completed reactivation at the Long Beach Naval Shipyard in April 1986 and was then assigned to the Long Beach Naval Station until the new homeport could be constructed. However, construction of the new homeport was delayed. In December 1988, in an effort to improve the overall military base structure and reduce costs, the Commission on Base Realignment and Closure recommended that the strategic homeport at Hunters Point not be executed, that the battleship and two cruisers be transferred to Pearl Harbor, and that six accompanying ships be split between San Diego and Long Beach, California. Pending transfer to Pearl Harbor, the battleship remains homeported at Long Beach.

To reduce the defense budget, the administration proposes deactivating two of the four battleships, the U.S.S. New Jersey and the U.S.S. Iowa, in its fiscal year 1991 budget. We testified² that the deactivation of the remaining two battleships should be actively considered in budget trade-off decisions being explored by the Department of Defense.

¹As part of the battleship surface action group, the Secretary of Defense also assigned one cruiser and three destroyers to Pearl Harbor and four frigates to Long Beach. In addition, four frigates and two mine countermeasure ships for the Naval Reserve Force were to be homeported at San Francisco (Hunters Point).

²Battleships: Issues Arising from the Explosion Aboard the U.S.S. Iowa (GAO/T-NSIAD-90-46, May 25, 1990).

In legislation enacted in 1989, the Secretary of the Navy was given the authority to transfer the Manana Storage Area and Pearl City Junction properties to the State of Hawaii for not less than the fair market value of the properties, as determined by him, provided certain conditions are met. The State can (1) design and construct a causeway connecting Ford Island to the naval base, (2) provide replacement facilities for naval activities occupying the properties, and (3) relocate the activities. Alternatively, the State may provide the funds or any combination of funds and design and construction of facilities plus relocation to allow the Secretary to accomplish the three requirements. These statutorily required actions would constitute the minimum compensation for the Manana Storage Area property; similar requirements exist for the Pearl City Junction property. The proposal to transfer the 122 acres of federally owned land to the State was made before the Commission recommended homeporting the battleship in Pearl Harbor. According to the Navy, the causeway is required, regardless of where the battleship is homeported.

Costs to Homeport the Battleship

The Navy's total nonrecurring and annual recurring costs are estimated to be \$63.6 million and \$47.5 million, respectively, to homeport the battleship at Pearl Harbor. The total nonrecurring and annual recurring costs will be \$17 million and \$46.3 million, respectively, to permanently homeport the battleship at Long Beach. The total nonrecurring costs do not include the cost to construct family housing, even though the availability of adequate, affordable housing at both locations could be a problem. We estimate that between \$38 million and \$59 million may be needed to construct 570 to 700 family housing units in Pearl Harbor. However, we excluded \$44 million for 516 family housing units in Long Beach since the retirement of the U.S.S. New Jersey could make more housing available. (See app. I for more detailed information about these costs.)

Pearl Harbor

The Navy estimates that about \$59.8 million—\$4.5 million to design and \$55.3 million to modify facilities—of the total nonrecurring cost of \$63.6 million will be needed to accommodate the battleship's homeporting in Pearl Harbor. The projects involve improving pier and shore facilities, constructing bachelor enlisted quarters, and expanding the club for enlisted personnel. Design of all projects is expected to be completed by May 1991. The Navy also expects to award the construction contracts after environmental documents are completed. All construction projects are expected to be completed by March 1993.

The Navy also estimates that about \$3.8 million in nonrecurring costs will be needed to relocate military personnel and their dependents. The relocation cost involves entitlements for member and dependent transportation allowances and transportation and storage of household goods. It also involves costs for transportation of private vehicles, temporary lodging expenses, and dislocation allowances.

The Navy expects its family housing requirements to increase by about 570 to 700 units if the battleship is homeported in Pearl Harbor, but it excluded the cost to construct the family housing units from its total estimated nonrecurring cost. The Navy determined that the requirements would be offset by continuing reductions in the number of other ships homeported and the military personnel stationed in Pearl Harbor and that it would rely on the use of government quarters and private sector housing to meet its needs. However, Army officials who are responsible for housing in Hawaii project a 6,056 unit combined service housing deficit in fiscal year 1993, which does not include the 570 to 700 unit increase that the battleship might impose. We estimate the cost to build the 570 to 700 family housing units could range from about \$38 million to about \$59 million.

The total estimated annual recurring cost of \$47.5 million is for base operating support, cost-of-living allowances, and variable housing allowances. The Navy's estimate represents \$45 million for base operating support (regardless of location) and \$1 million for annual cost-of-living allowances. Additionally, on the basis of variable housing allowances currently paid to the battleship's personnel, we estimate \$1.5 million will be incurred for this allowance. However, these allowances depend on various factors and circumstances of the relocation.

Long Beach

Currently, U.S.S. Missouri personnel are housed on the ship, in military housing, and in the private sector. The Navy estimated that \$44 million would be required for construction of 516 family housing units for service members now housed in the private sector. The Navy, in its estimate, assumed that the U.S.S. New Jersey, which is scheduled to be decommissioned in fiscal year 1991, would remain in active service at the naval station and that the shipyard, which has been proposed for closure, would remain open. However, if the decommissioning of the U.S.S. New Jersey is considered, we believe the Navy's additional family housing requirement could be eliminated. Thus, we excluded this amount from the Navy's total estimated nonrecurring cost, leaving \$17 million to design and construct additions to its support facilities. These

additions would be made to operations and training facilities, an administration building, the barracks/mess hall, and morale, welfare, recreation facilities.

The total annual recurring cost of \$46.3 million, in addition to the base operating support cost, includes \$1.3 million in variable housing allowances. Cost-of-living allowances would not be incurred because only members stationed outside the continental United States are entitled to such allowances.

Naval Shipyards

Both the Pearl Harbor and Long Beach Naval Shipyards have the capabilities to provide continuous and immediate industrial support for the battleship. As of September 30, 1989, the Pearl Harbor shipyard had a work force of 6,389 to perform major overhauls for nuclear attack submarines and major combatants (i.e., battleships or cruisers). Its waterfront facilities consist of 31 berthing piers and 4 dry docks. The Long Beach shipyard had a work force of 4,698 to perform overhauls for major combatants, and its waterfront facilities consist of four industrial piers, two wharfs, and three dry docks.

Ford Island Development

The Navy is authorized to convey 122 acres of land in Pearl Harbor to the State of Hawaii for not less than the fair market value of the properties. According to the Navy, the fair market value of these properties has not been determined because there have been no recent sales of comparable properties in the area. As a result, the fair market value of these properties is being negotiated, and, to a large extent, the value will depend on local government decisions as to permissible land uses for redevelopment. In June 1988, the Commander of the Pearl Harbor Naval Base informed the Governor of Hawaii that 108 acres of that land would be worth about \$31 million, if it is developed for single family housing, or \$84 million, if it is developed for higher density use. The Navy declined to provide us with information on its estimated value of the remaining 14 acres because it believes disclosure of such information could jeopardize its negotiating position. However, the 14-acre Pearl City Junction property is in close proximity to the 108-acre Manana Storage Area property. (See fig. II.1.) The Navy expects the State to design and construct the causeway for about \$71 million and to replace facilities for naval activities occupying the properties and to relocate these activities for about \$10.3 million. (See app. II.)

Our objectives, scope, and methodology are provided in appendix III. We obtained oral agency comments on a draft of this report and have incorporated them where appropriate.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Chairmen, Senate Committee on Government Affairs, House Committee on Government Operations, and Senate and House Committees on Armed Services and on Appropriations; the Hawaiian Delegation, the Director, Office of Management and Budget; and the Secretaries of Defense and the Navy. We also will send copies to interested parties and make copies available to others upon request.

If you or your staff have questions about this report, please contact me on (202) 275-6504. Major contributors to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Martin M. Ferber", with a long horizontal flourish extending to the right.

Martin M Ferber
Director, Navy Issues

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Abbreviations

BAQ	basic allowance for quarters
DRMO	Defense Reutilization and Marketing Office
VHA	variable housing allowance

Homeporting of the U.S.S. Missouri

Homeporting the U.S.S. Missouri in Pearl Harbor will be more costly to the Navy than homeporting the battleship in Long Beach. Excluding family housing cost, the total estimated nonrecurring cost to homeport the battleship in Pearl Harbor is \$63.6 million compared to \$17 million in Long Beach. The total estimated nonrecurring costs do not include family housing, even though the availability of adequate, affordable housing at both locations could be a problem.

Due to a dwindling rental market, high rents, and increased military eligibility, a significant family housing deficit is projected for Hawaii in fiscal year 1993. Thus, sufficient family housing may not be available when battleship personnel arrive in fiscal year 1993. The Navy did not include the cost to construct family housing at Pearl Harbor because the projected housing deficit was not attributed to the arrival of the battleship. However, we estimate that between \$38 million and \$59 million may be needed to construct 570 to 700 family housing units in Pearl Harbor if sufficient government quarters are not available.

The Navy estimated \$44 million would be required for family housing in Long Beach. A housing deficit also is projected for Long Beach, but the Navy did not consider that the decommissioning of the U.S.S. New Jersey in fiscal year 1991 could eliminate the projected housing deficit. Thus, we decreased the Navy's total estimated nonrecurring cost to \$17 million. The total estimated annual recurring cost at Pearl Harbor will be about \$47.5 million compared to \$46.3 million in Long Beach.

The naval shipyards at Pearl Harbor and Long Beach have the facilities and sufficiently skilled work forces to dry-dock and overhaul the battleship. However, in January 1990, the Secretary of Defense proposed that the Long Beach shipyard be closed as part of the drawdown of the U.S. military.

Background

In the mid-1980s, as part of the buildup toward a 600-ship Navy, the Congress approved and began funding the Navy's strategic homeporting program. By 1985, the Navy had selected 13 preferred sites for the program, and in June 1985, the Secretary of Defense announced San Francisco (Treasure Island) as the strategic homeport for the U.S.S. Missouri and one cruiser and Pearl Harbor and Long Beach as homeports for the eight other accompanying ships. The Secretary later changed the Treasure Island site, due to dredging cost and environmental factors, to Hunters Point, California.

The U.S.S. Missouri (BB-63) was one of four Iowa-class battleships reactivated during the 1980s. It was reactivated at the Long Beach Naval Shipyard in April 1986, recommissioned in May 1986, and assigned to Long Beach Naval Station, along with the U.S.S. New Jersey, until the new homeport could be constructed. However, construction of the new homeport at Hunters Point was delayed. Meanwhile, the battleship remained homeported at the Long Beach Naval Station.

On May 3, 1988, the Secretary of Defense signed a charter establishing the Commission on Base Realignment and Closure. The Commission was to review and recommend bases inside the United States for realignment and closure, including those under construction or planned for construction. On October 24, 1988, the Defense Authorization Amendments and Base Closure and Realignment Act (P.L. 100-526), which requires the Secretary of Defense and the Congress to accept all or none of the Commission's recommendations, was enacted. The act stipulates that once the Secretary of Defense accepts all of the Commission's recommendations and the Congress does not enact a joint resolution of disapproval, the Commission's recommendations become effective.

In its December 29, 1988, report, the Commission recommended that the strategic homeport for the battleship and accompanying ships at Hunters Point not be executed, that the battleship and two cruisers be homeported at Pearl Harbor, that one cruiser, two destroyers, and two frigates be relocated to San Diego, and that one cruiser be relocated to Long Beach. Military value, not cost, was the principal criterion on which most recommendations were made. However, for the strategic homeports, the Commission focused on planned construction costs.

The Secretary of Defense accepted the Commission's recommendations on January 5, 1989, and, later, the legislative requirements for acceptance of the Commission's recommendations were met.

Because of the declining defense budget, the administration's fiscal year 1991 defense budget proposes deactivating two of the four battleships, the U.S.S. New Jersey and the U.S.S. Iowa. In our May 25, 1990, testimony before the Senate Committee on Armed Services, we stated that because the battleships are costly to maintain and difficult to staff and because of the unanswered safety and mission-related questions, the Department of Defense should actively consider the decommissioning of the remaining two battleships in its budget trade-off decisions.

Homeporting the Battleship at Pearl Harbor

The Navy is preparing to homeport the U.S.S. Missouri in Pearl Harbor for a total estimated nonrecurring cost of \$63.6 million and an annual recurring cost of about \$47.5 million. As shown in table I.1, nonrecurring costs are for constructing additions to operational and support facilities and relocating military personnel and their dependents. However, the estimate excludes the cost to construct family housing. The annual recurring costs are for operation and support of the battleship after its arrival in fiscal year 1993 and allowances to offset housing expenses.

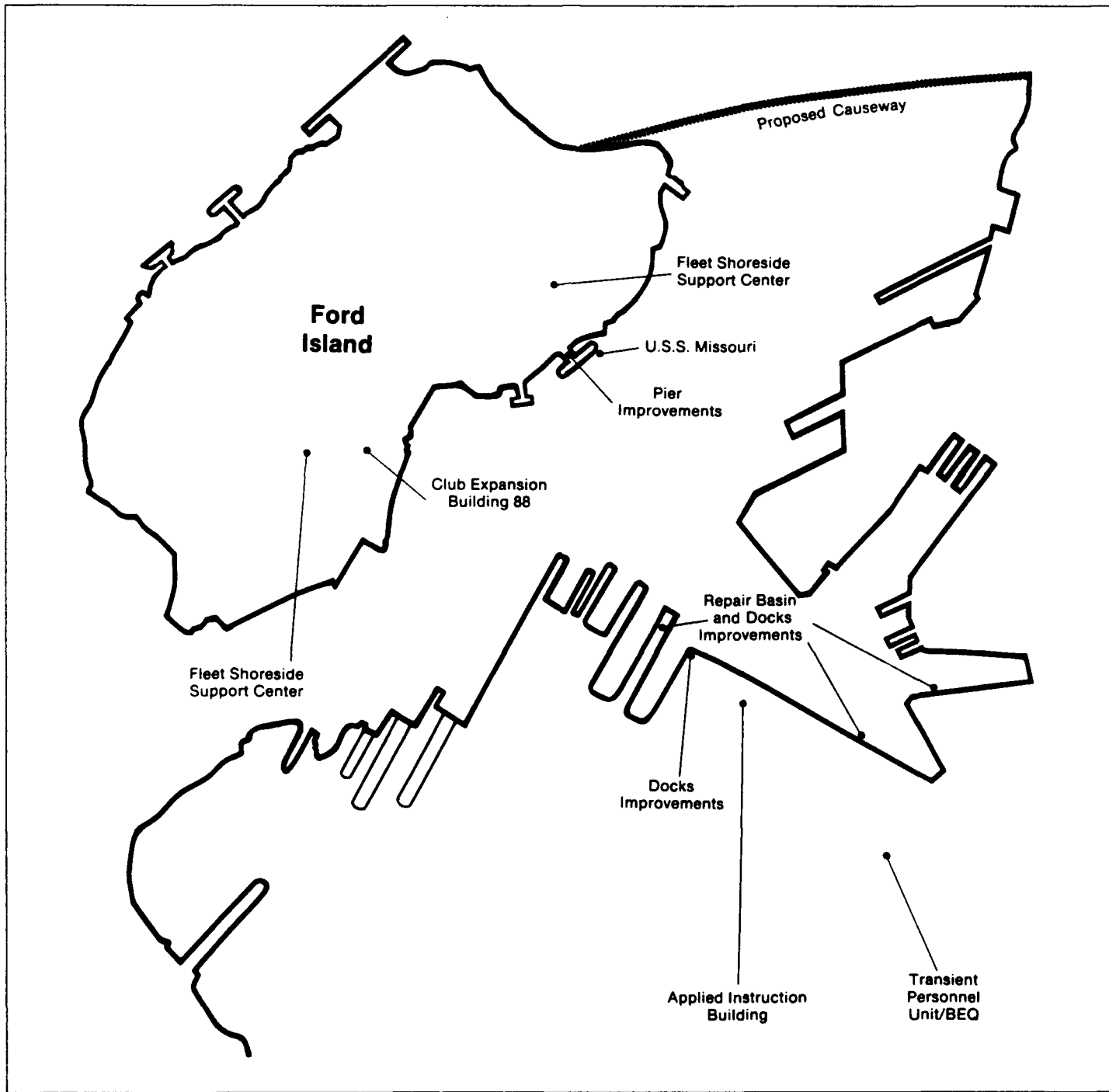
Table I.1: Estimated Costs to Homeport the U.S.S. Missouri in Pearl Harbor

Dollars in millions	
Nonrecurring	
Design and construction	\$59.8
Relocation	3.8
Total	\$63.6
Recurring (annual)	
Operations and maintenance	\$45.0
Variable housing allowance	1.5
Cost-of-living allowance	1.0
Total	\$47.5

Design and Construction Costs

The Navy estimates it will cost \$4.5 million to design facilities and \$55.3 million to modify facilities to accommodate the battleship. The locations of the construction projects are shown in figure I.1.

Figure I.1: Location of Construction Projects at Pearl Harbor



Source: U.S. Navy

The construction projects in support of the battleship and their estimated costs are shown in table I.2.

**Table I.2: Estimated Costs of
Construction Projects for Pearl Harbor**

Dollars in millions	
Project title	Estimated cost
Pier and shore improvements	\$45.0
Bachelor enlisted quarters	4.8
Fleet personnel support center	3.0
Club expansion (Ford Island)	2.5
Total	\$55.3

The Navy's fiscal year 1991 congressional budget submission for military construction includes a funding request for the pier and shore improvements and bachelor enlisted quarters projects.¹ The remaining projects are to be included in the Navy's fiscal year 1992 military construction budget.

As of February 1990, design of the projects was about 35 percent complete. The Navy expects all design work to be completed by May 1991, and most construction contracts are expected to be awarded in September or October 1990, after completion of environmental documentation, which was expected in August 1990. All construction projects are expected to be completed by March 1993.

Relocation Costs

As shown in table I.3, the Navy estimates \$3.8 million in nonrecurring costs will be needed to relocate the crew and their dependents to Pearl Harbor.

¹ Wharf modification projects, estimated at \$13.8 million, and an applied instruction facility, estimated to cost \$1.6 million, are also planned, but they will support the two AEGIS cruisers. One wharf modification project, valued at \$7.0 million, has been submitted for the fiscal year 1991 program. The other projects for the cruisers will be submitted in fiscal year 1992.

Table I.3: Estimated Relocation Costs

Dollars in millions

	Estimated cost
Transportation of members and dependents	\$.2
Transportation and storage of household goods	2.6
Nontemporary storage of household goods	.1
Transportation of privately owned vehicles	.6
Dislocation	.3
Temporary lodging expense	^a
Total	\$3.8

^aLess than \$1,000.

Housing and Housing Allowances

The Navy advised us that family housing requirements would increase by 570 to 700 units if the battleship is homeported in Pearl Harbor. The Navy excluded the cost to build the family housing units from its total estimated nonrecurring cost because it expects the requirements to be met through use of government quarters and reliance upon the private sector. However, a waiting list exists for military family housing. In addition, Army officials who are responsible for all military housing in Hawaii project a combined service housing deficit in fiscal year 1993 due to a diminishing housing market, high rental rates, and increased military eligibility. The projected deficit does not include the 570 to 700 unit increase that the battleship might impose. As a result, sufficient military and civilian housing may not be available. On the basis of the current unit cost for family housing in Hawaii, we estimate that the 570 to 700 units will cost from \$38 million to \$59 million, depending on the number of bedrooms constructed.

Military housing needs are evaluated on the basis of how military members are currently housed, community vacancy rates, average housing costs in the communities, and projected community growth. Because the Department of Defense policy relies on the community to provide housing, acquisition is planned only to the degree that, in an assessment of the above mentioned factors, there is a strong possibility that the community will not meet the total needs.

According to the Navy, its family housing requirements have not increased significantly above the number of units that it turned over to Army management in 1983. Further, the Navy advised that the 1984 strategic homeporting study and annual base loading data since then show a reduction from 44 ships and 9,727 personnel in fiscal year 1983

to 39 ships and 8,069 personnel in fiscal year 1989. The number of ships increased to 49 in fiscal year 1990 with 10,086 personnel. While the number of ships will decline to 47 ships in fiscal year 1993, personnel will increase to 10,131. The slight personnel increase between fiscal year 1990 and fiscal year 1993 is attributed primarily to the arrival of the U.S.S. Missouri, which carries a complement of 67 officers and 1,453 enlisted personnel, and the two cruisers with a total complement of 60 officers and 740 enlisted personnel. However, the increase is offset by a number of ships leaving the area.

The Oahu Consolidated Family Housing Office manages military family housing for all branches of services in Hawaii. Annual assessments of family housing needs are done for specific locations. The office's fiscal year 1989 military family housing assessment shows a projected deficit of 1,691 in Pearl Harbor and an overall 6,056 deficit for all services in Hawaii for fiscal year 1993. These deficits do not consider the crew of the U.S.S. Missouri. Further, Army housing data show that Hawaii has the lowest rental vacancy rate in the United States and rental rates have increased an average 33.9 percent in the last 5 years.

If sufficient government quarters are not available, those families waiting for military housing and those who prefer to live off base must then compete with the civilian population for adequate housing in an expensive housing market. As of February 27, 1990, 1,437 service members were on the waiting list for military housing in Pearl Harbor. According to Army data, about 13,000 military families in Hawaii, or 38 percent, must compete in the limited and expensive civilian housing market. Members who are entitled to a basic allowance for quarters (BAQ) are authorized a variable housing allowance (VHA) to assist in defraying housing costs. On the basis of the VHA currently paid to U.S.S. Missouri personnel, we estimate that \$1.5 million could be incurred in VHA costs if the battleship is homeported in Pearl Harbor. The actual cost will depend on the number of dependents, if any, and the rental or ownership expenses incurred upon occupancy of a permanent resident. However, according to rental data furnished by the Oahu family housing office, the combined BAQ and the VHA may not be sufficient to cover civilian housing for all grades. For example, the total BAQ and VHA for an E-3 with dependents is \$614 monthly, but the average monthly rental for a two-bedroom apartment in Pearl Harbor is \$898.

**Base Operating Support
Costs**

The Navy included \$45 million—the cost regardless of location—in its total estimated annual recurring cost for operations and maintenance. According to the Navy, a naval station's base operating costs are not broken down by individual ships, and a ship's impact on these costs is more dependent on the ship's operating schedule than where it is homeported. The longer the ship is in its homeport, rather than deployed during a fiscal year, the greater impact it has on the naval station's operating costs.

Other Costs

Of the total annual recurring cost, the Navy estimates that less than \$1 million would be required for cost-of-living adjustments. We estimate that these adjustments will range from \$560 annually for an E-1 with less than 2 years of service and no dependents to \$2,536 annually for an O-6 with 26 years of service and five or more dependents.

**Homeporting the
Battleship at Long
Beach**

The total estimated nonrecurring and annual recurring costs to permanently homeport the U.S.S. Missouri at Long Beach are \$17 million and \$46.3 million, respectively. The total estimated nonrecurring cost is for additions to support facilities and it also excludes family housing costs. The Navy had included \$44 million in its estimate to construct 516 family housing units. However, we excluded this amount from our calculation because the Navy's estimate did not consider the decommissioning of the U.S.S. New Jersey in fiscal year 1991. Because the U.S.S. Missouri is already homeported in Long Beach, the Navy will not incur any relocation costs, nor will it incur any costs for public works improvements, training, or employment. The total estimated annual recurring cost includes \$45 million for base operating support costs and \$1.3 million in variable housing allowance. Cost-of-living allowances were excluded because only members stationed overseas are entitled to such an allowance.

**Design and Construction
Costs**

As a result of base realignment and closure recommendations, the Navy has not planned any design and construction projects at Long Beach and has not provided for any construction in its long-range plans. However, the Navy updated a December 1984 facilities impact analysis of requirements for homeporting the battleship at Long Beach to reflect improvements already undertaken. It estimated that \$61 million would be needed—\$17 million for additions to operations and training, storage, administration, barracks and mess hall, base and personnel support,

morale, welfare, and recreation facilities and work shops and \$44 million for 516 family housing units. According to the Navy, the U.S.S. Missouri crew has relied, in part, on the private sector to provide adequate, affordable housing. However, the Navy will program for housing acquisition because the community does not provide adequate, affordable housing. The fiscal year 1989 housing survey for Long Beach shows a projected net deficit of 1,664 units. As of September 30, 1989, 1,195 service members were on the military housing waiting list.

Housing Allowance

About \$1.3 million of the total annual recurring cost is for the VHA currently being paid to military personnel assigned to the U.S.S. Missouri. However, according to Long Beach officials, the local housing costs are high and often beyond the means of its military personnel. For example, an E-3 receives a total BAQ and VHA of \$576 per month, but the average two-bedroom apartment rents for \$850 per month without utilities. These Navy officials also stated that many of the affordable units are located in high crime areas.

Naval Shipyards

The Pearl Harbor and Long Beach Naval Shipyards have the facilities and sufficiently skilled work forces to provide repair and maintenance support for the battleship. These naval shipyards could provide immediate and continuous industrial support and can dry-dock and overhaul the battleship.

According to the Navy, the Pearl Harbor Naval Shipyard is the largest ship repair facility between the west coast and the Far East, and its waterfront facilities consist of 31 berthing piers and 4 dry docks. As of September 30, 1989, it had a work force of 6,389 who performed overhauls and other work for nuclear attack submarines, major complex combatants (battleships, destroyers, cruisers, frigates), and other auxiliary ships homeported in Pearl Harbor.

The Long Beach Naval Shipyard has the only dry dock south of San Francisco capable of docking aircraft carriers, battleships, and amphibious ships. Its waterfront facilities consist of four industrial piers, two wharfs, and three dry docks. As of September 30, 1989, it had a work force of 4,698 who performed scheduled and unscheduled overhauls for aircraft carriers and other major combatants.

Ford Island Development

The Navy is authorized to convey the Manana Storage Area and Pearl City Junction, located in Pearl City, Hawaii, to the State of Hawaii for not less than the fair market value of the properties. By law, the minimum compensation the Navy can accept for the Manana Storage Area property is a causeway, replacement facilities, and relocation costs. Similar statutory guidance with respect to establishing the minimum acceptable value for the Pearl City Junction property exists. According to the Navy, the fair market value of the properties has not been determined because there have been no recent sale of comparable property in the area.

The Navy's estimate of the potential of the Manana Storage Area property ranges from \$31 million to \$84 million, depending on zoning. The Navy declined to provide its estimated value for the Pearl City Junction property because it believes disclosure of such information could jeopardize its negotiating position. However, the 14-acre Pearl City Junction property is in close proximity to the 108-acre Manana Storage Area property. The Navy estimates the State of Hawaii could provide the causeway and replacement facilities and relocate the Navy activities for about \$81 million.

Background

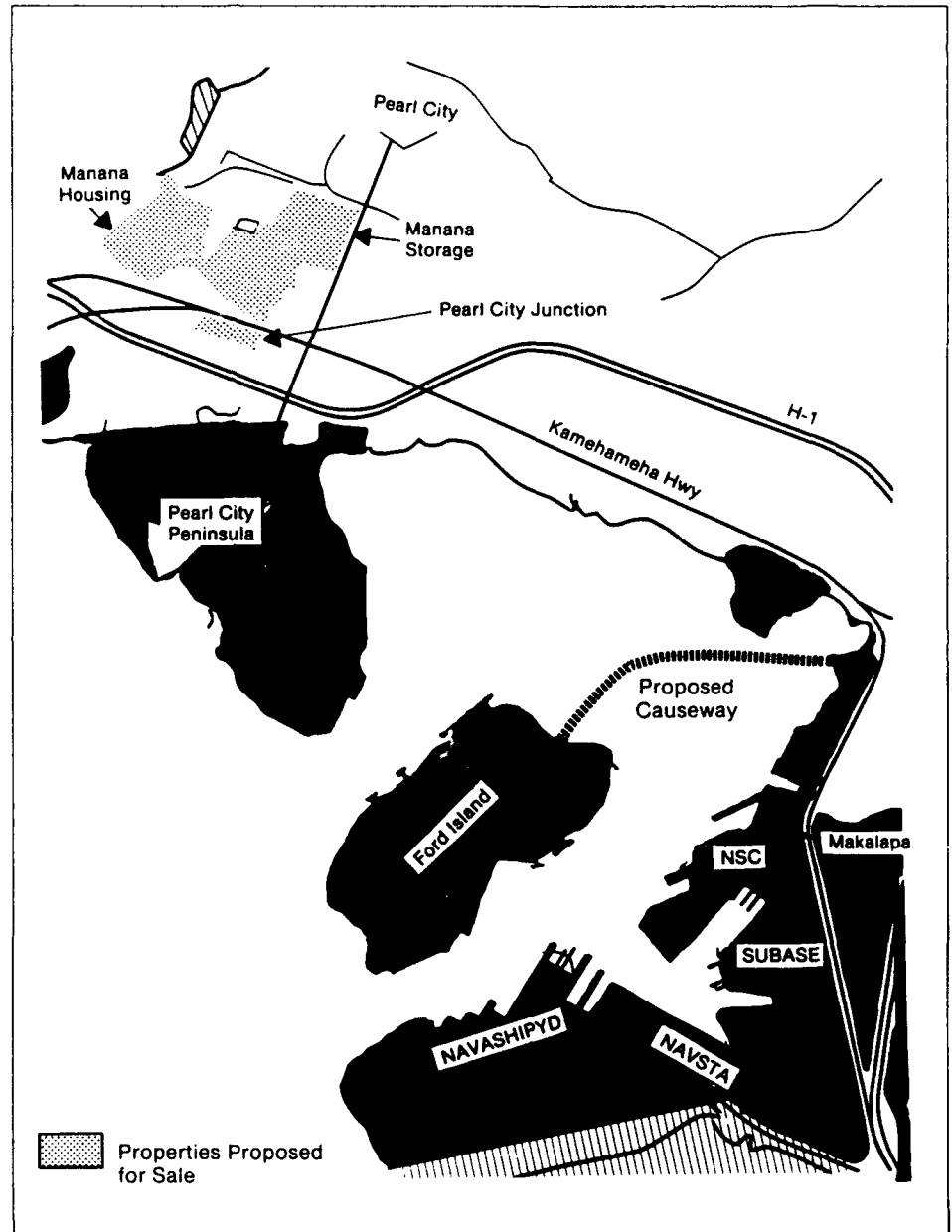
Section 127 of the fiscal year 1990 military construction appropriations act (P.L. 101-148) provides authority for the Secretary of the Navy to convey about 122 acres of federally owned land, known as the Manana Storage Area and Pearl City Junction, to the State of Hawaii for not less than the fair market value of the properties, as determined by him. As minimum consideration for the transfer of the Manana Storage Area property, the State can (1) design and construct an openable causeway from Pearl Harbor Naval Base to Ford Island; (2) provide replacement facilities for the Navy activities presently on the property; and (3) relocate the activities or (4) provide funds in lieu of any part of the required design, construction, replacement, or relocation.

For the Pearl City Junction property, the Navy can accept either funds or actual design and construction of the facilities plus relocation or a combination of both to accommodate consolidating and relocating the functions on the property to other Navy or Marine Corps property. This may include (1) relocation and consolidation of functions at Manana Storage Area and Pearl City Junction properties to common replacement facilities and (2) relocation of Marine Corps functions that would be displaced by such consolidation to replacement facilities to be designed and constructed at Marine Corps Air Station, Kaneohe Bay. The Navy plans

to berth the U.S.S. Missouri at facilities on Ford Island. However, the Navy has been developing the causeway construction project since 1982—6 years before the decision was made to homeport the U.S.S. Missouri in Hawaii. In fiscal year 1987, the Navy submitted a request for funding as part of its military construction program. The project, however, was not approved due to its high cost and other projects that had higher priorities. Thus, in recognition of the State's requirement for additional land in the Aiea/Pearl City area and because of the high project cost, the Navy pursued financing methods other than military construction to satisfy the State's and its own needs. Alternatively, it proposed transferring the 108-acre Manana Storage Area and the 14-acre Pearl City Junction properties (see figure II.1) to the State in return for its building the causeway and making needed improvements on Ford Island. However, before the venture could be undertaken, special legislation was required to authorize the Secretary of the Navy to sell and replace the properties and to use the proceeds to acquire the causeway.

The properties have not been declared excess because they are required for future Navy housing. However, the Navy stated that retaining the properties is less desirable if Ford Island is available for development because of their remote locations and the increased traffic congestion in Pearl Harbor. Currently, the Navy Exchange and the Defense Reutilization and Marketing Office (DRMO) use the properties for warehousing.

Figure II.1: Navy Properties Proposed for Sale in Hawaii



Source: U.S. Navy

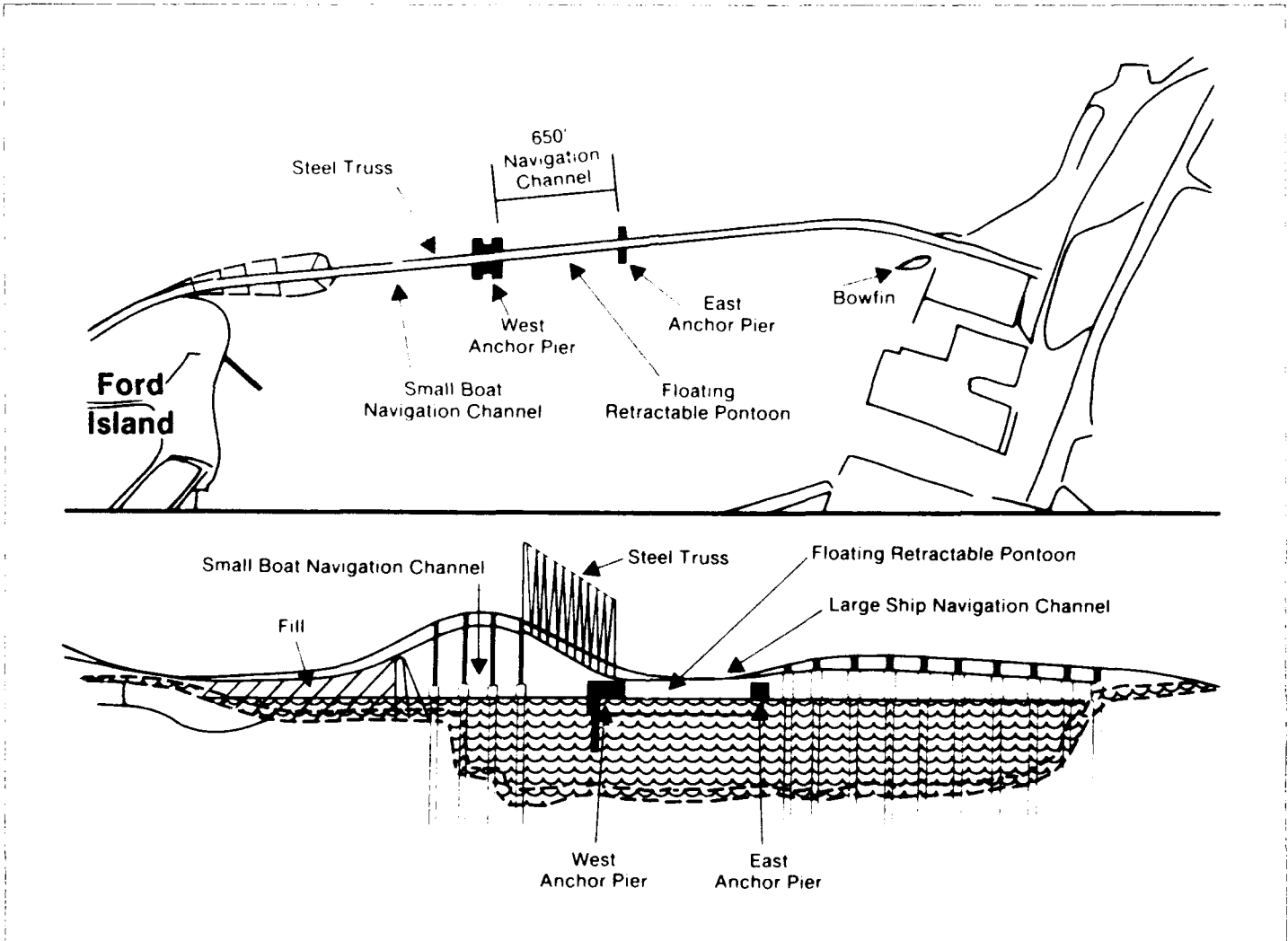
Ford Island contains 450 acres of land, including 300 acres of open space, which the Navy believes is not being used to its fullest extent. Presently, a vehicular ferry and a passenger boat transportation system are used to connect Ford Island and the base. According to the Navy,

this system is slow and inefficient and severely constrains the potential use of Ford Island's vacant land and underused facilities. The Navy proposes to (1) set aside 100 acres of undeveloped land on Ford Island as a site for future family housing and (2) construct other facilities if access is provided. However, construction of the causeway is not required to implement the base closure recommendations, though it would improve access to Ford Island and permit development of the underused acreage of the Island.

The Causeway

The Navy estimates design and construction costs for the 4,100 feet causeway will be \$71 million. It has considered various design concepts for the causeway to Ford Island, but the preferred design, shown in figure II.2, consists of a small boat navigation channel on the Ford Island side, a concrete pile causeway approach on the Halawa side, with a concrete openable section in the middle. The causeway would retract to provide a 650-foot wide opening with sufficient clearance for the transiting of aircraft carriers and would have two traffic lanes, shoulders, sidewalk, guard rail, and lighting. The opening feature would have an estimated 50-minute open and close cycle.

Figure II.2: Proposed Ford Island Causeway



Source U.S. Navy

Land Sales

The Navy is negotiating a fair market value for the Manana Storage Area and Pearl City Junction properties. According to the Navy, the fair market value of these properties has not been determined because there have been no recent sales of comparable property in that area. The value of the properties, to a large extent, will depend upon local government decisions as to permissible land uses for redevelopment. In June 1988, the Commander of the Pearl Harbor Naval Base informed the Governor of Hawaii that the 108-acre Manana Storage Area property would

be worth \$31 million, if it is developed for single family housing, or \$84 million, if it is developed for higher density use. The Navy declined to provide us with the information on its estimated value of the Pearl City Junction property because it believes disclosure of such information could jeopardize its negotiating position. However, the Navy advised us that in each case, additional consideration will be required, to the extent needed, to ensure that the government receives no less than full fair market value for the property.

Replacement and Relocation of Functions

As shown in table II.1, replacement facilities for naval activities currently occupying the properties and relocation of these activities are estimated to cost \$10.3 million.

Table II.1: Replacement and Relocation of Activities

Dollars in millions	
Activity	Estimated cost
Fire safety and upgrade for Navy Exchange	\$6.9
Renovation of Marine Corps warehouses	2.5
Storage aids and improvements	6
Relocation of activities	3
	\$10.3

The Navy proposes to relocate the Navy Exchange to four vacant hangars on Ford Island. Upgrading the facilities for replacement use is estimated at \$6.9 million. DRMO will be relocated to space on Pearl City Peninsula currently used for Marine Corps storage. The Navy will use revenue from the sale of Pearl City Junction property to construct new Marine Corps warehouses at Kaneohe Bay and renovate existing warehouses on Pearl City Peninsula for DRMO's use. It will also require an estimated \$2.5 million from the conveyance of the Manana Storage Area property to complete renovation of the Marine Corps warehouses.

A building on Pearl City Peninsula is proposed as a replacement facility for other tenants that have a basic requirement for storage space. Currently, an Army activity occupies this building, but it will be requested to relocate to Army property. Storage aids and other improvements to this building are estimated to cost \$600,000. Relocation of all activities is expected to total about \$250,000.

Objectives, Scope, and Methodology

At the request of Congressman Dana Rohrabacher, we compared the costs to homeport the U.S.S. Missouri in Pearl Harbor with the costs to homeport the battleship in Long Beach. As Congressman Rohrabacher further requested, we determined if the naval shipyards had sufficient repair and maintenance facilities to dry dock and overhaul the battleship. We also compared the potential value of the Manana Storage Area and Pearl City Junction properties with the construction cost of the causeway and other statutory actions required as a result of the authorized conveyance of the properties.

In accomplishing our objectives, we reviewed various Navy documents, including site plans, proposed berthing layouts, and cost estimates. We analyzed the Navy's estimates, but we did not verify the accuracy of the Navy's estimates. On the basis of our analysis of the estimates and supporting information, we adjusted the Navy's estimates in some cases. We also held discussions with officials of the Department of Defense's Office of the Deputy Chief of Naval Operations (Logistics); the Per Diem, Travel and Transportation Allowance Committee; the Naval Facilities Engineering Command, the Naval Sea Systems Command; the Naval Military Personnel Command; the Commander in Chief, Pacific Fleet; Pearl Harbor and Long Beach Naval Stations; the Department of the Army, Oahu Consolidated Family Housing Office; and other offices involved in developing the strategic homeporting plan and implementing the base realignment and closure recommendations. Further, we visited Long Beach and Pearl Harbor to make first hand observation of existing facilities.

We performed our review from November 1989 through August 1990 in accordance with generally accepted government auditing standards.

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